

U.S. Patent Appln. 10/691,337
Amendment... filed October 28, 2005
Response to Office Action dated June 28, 2005

LISTING OF CLAIMS:

This listing of claims will replace all prior versions, and listing, of claims in the application.

1. (Currently Amended) A liquid container comprising:
a liquid storing unit storing a liquid to be supplied to a liquid ejection head; and
a waste liquid storing unit recovering and storing the liquid passing through the liquid ejection head ~~as~~that is a waste liquid; and
a case in which the waste liquid storing unit is provided,
the waste liquid storing unit including:
a waste liquid storing chamber holding the waste liquid; and
a waste liquid passage guiding the waste liquid to the waste liquid storing chamber,
wherein the waste liquid passage ~~is configured~~is arranged between opposite ends of the case in at least two directions such that at least a part thereof is positioned above a liquid level of the liquid stored in the liquid storing unit in a with respect to a direction of gravity
~~direction~~-in each position when the liquid container is positioned so as to direct in a plurality of directions with respect to the direction of gravity-direction.

2. (Currently Amended) ~~The liquid container according to claim 1~~A liquid container comprising:
a liquid storing unit storing a liquid to be supplied to a liquid ejection head; and

U.S. Patent Appln. 10/691,337
Amendment... filed October 28, 2005
Response to Office Action dated June 28, 2005

a waste liquid storing unit recovering and storing the liquid passing through the liquid ejection head that is a waste liquid,

the waste liquid storing unit including:

a waste liquid storing chamber holding the waste liquid; and

a waste liquid passage guiding the waste liquid to the waste liquid storing chamber,

wherein the waste liquid passage is arranged such that at least a part thereof is positioned above a liquid level of the liquid stored in the liquid storing unit with respect to a direction of gravity in each position when the liquid container is positioned so as to direct in a plurality of directions with respect to the direction of gravity,

wherein the waste liquid passage includes a waste liquid absorber which absorbs and holds at least some of the waste liquid therein.

3. (Currently Amended) ~~The liquid container according to claim 1~~ A liquid container comprising:

a liquid storing unit storing a liquid to be supplied to a liquid ejection head; and

a waste liquid storing unit recovering and storing the liquid passing through the liquid ejection head that is a waste liquid,

the waste liquid storing unit including:

a waste liquid storing chamber holding the waste liquid; and

a waste liquid passage guiding the waste liquid to the waste liquid storing chamber,

U.S. Patent Appln. 10/691,337
Amendment... filed October 28, 2005
Response to Office Action dated June 28, 2005

wherein the waste liquid passage is arranged such that at least a part thereof is positioned above a liquid level of the liquid stored in the liquid storing unit with respect to a direction of gravity direction in each position when the liquid container is positioned so as to direct in a plurality of directions with respect to the direction of gravity,

wherein the waste liquid passage is ~~formed~~defined by a groove provided on a case of the liquid container and a film covering an opening of the groove.

4. (Currently Amended) The liquid container according to claim 3, wherein the case ~~takes a box shape having one side opened~~has the shape of a box with one side open,

the groove is formed by partitioning an inner part of the case with a wall face, and the waste liquid storing chamber is formed by covering with the film a waste liquid storing portion which is simultaneously partitioned with the wall face.

5. (Original) The liquid container according to claim 4, wherein the film forming the waste liquid storing chamber is integrated with the film forming the waste liquid passage.

6. (Original) The liquid container according to claim 1, wherein the waste liquid passage is formed by a flexible tube.

7. (Currently Amended) ~~The liquid container according to claim 1~~A liquid container comprising:

a liquid storing unit storing a liquid to be supplied to a liquid ejection head; and
a waste liquid storing unit recovering and storing the liquid passing through the liquid ejection head that is waste liquid,

U.S. Patent Appln. 10/691,337
Amendment... filed October 28, 2005
Response to Office Action dated June 28, 2005

the waste liquid storing unit including:

a waste liquid storing chamber holding the waste liquid; and

a waste liquid passage guiding the waste liquid to the waste liquid storing chamber,

wherein the waste liquid passage is arranged such that at least a part thereof is positioned above a liquid level of the liquid stored in the liquid storing unit with respect to a direction of gravity in each position when the liquid container is positioned so as to direct in a plurality of directions with respect to the direction of gravity,

wherein the waste liquid passage includes a valve device therein.

8. (Currently Amended) ~~The liquid container according to claim 1~~ A liquid container comprising:

a liquid storing unit storing a liquid to be supplied to a liquid ejection head; and

a waste liquid storing unit recovering and storing the liquid passing through the liquid ejection head that is a waste liquid,

the waste liquid storing unit including:

a waste liquid storing chamber holding the waste liquid; and

a waste liquid passage guiding the waste liquid to the waste liquid storing chamber,

wherein the waste liquid passage is arranged such that at least a part thereof is positioned above a liquid level of the liquid stored in the liquid storing unit with respect to a direction of gravity in each position when the liquid container is positioned so as to direct in a plurality of directions with respect to the direction of gravity,

U.S. Patent Appln. 10/691,337
Amendment... filed October 28, 2005
Response to Office Action dated June 28, 2005

wherein the waste liquid passage has a volume of not more than 10% ~~or less~~ of a volume of the liquid storable in the liquid storing unit.

9. (Currently Amended) The liquid container according to claim 2, wherein the waste liquid passage is ~~formed~~defined by a groove provided on a case of the liquid container and a film covering an opening of the groove.

10. (Currently Amended) The liquid container according to claim 9, wherein the case ~~takes a box shape having one side opened~~has the shape of a box with one side open,

the groove is formed by partitioning an inner part of the case with a wall face, and the waste liquid storing chamber is formed by covering with the film a waste liquid storing portion which is simultaneously partitioned with the wall face.

11. (Original) The liquid container according to claim 10, wherein the film forming the waste liquid storing chamber is integrated with the film forming the waste liquid passage.

12. (Original) The liquid container according to claim 2, wherein the waste liquid passage is formed by a flexible tube.

13. (Original) The liquid container according to claim 2, wherein the waste liquid passage includes a valve device therein.

U.S. Patent Appln. 10/691,337
Amendment... filed October 28, 2005
Response to Office Action dated June 28, 2005

14. (Currently Amended) The liquid container according to claim 2, wherein the waste liquid passage has a volume of not more than 10% ~~or less~~ of a volume of the liquid storable in the liquid storing unit.

15. (Original) The liquid container according to claim 3, wherein the waste liquid passage includes a valve device therein.

16. (Currently Amended) The liquid container according to claim 3, wherein the waste liquid passage has a volume of not more than 10% ~~or less~~ of a volume of the liquid storable in the liquid storing unit.

17. (Original) The liquid container according to claim 6, wherein the waste liquid passage includes a valve device therein.

18. (Currently Amended) The liquid container according to claim 6, wherein the waste liquid passage has a volume of not more than 10% ~~or less~~ of a volume of the liquid storable in the liquid storing unit.

19. (Currently Amended) A liquid ejection apparatus having a liquid container comprising a liquid storing unit storing a liquid to be supplied to a liquid ejection head and a waste liquid storing unit recovering and storing the liquid passing through the liquid ejection head as that is a waste liquid,

the waste liquid storing unit including:

a waste liquid storing chamber holding the waste liquid; and

U.S. Patent Appln. 10/691,337
Amendment... filed October 28, 2005
Response to Office Action dated June 28, 2005

a waste liquid passage guiding the waste liquid to the waste liquid storing chamber,

wherein the waste liquid passage ~~is configured~~ is arranged between opposite ends of the case in at least two directions such that at least a part thereof is positioned above a liquid level of the liquid stored in the liquid storing unit in a with respect to a direction of gravity ~~direction~~ in each position when the liquid container is positioned so as to direct in a plurality of directions with respect to the direction of gravity ~~direction~~.

20. (New) A liquid container comprising:

a liquid storing unit storing a liquid to be supplied to a liquid ejection head;

a waste liquid storing unit recovering and storing the liquid passing through the liquid ejection head that is a waste liquid, the waste liquid storing unit having a waste liquid storing chamber; and

a cover, in which the waste liquid storing chamber is provided, including a plate-shaped portion and an inner frame portion projected from the plate-shaped portion, the inner frame portion having a first side surface and a second side surface adjacent to the first side surface on an inside thereof, and a wall portion projected from the plate-shaped portion having a first part substantially in parallel with the first side surface and a second part substantially in parallel with the second side surface,

wherein a groove is defined between the wall portion and the first and second side surfaces of the inner frame portion so as to extend along the first and second side surfaces and so as to communicate with the waste liquid storing chamber.

U.S. Patent Appln. 10/691,337
Amendment... filed October 28, 2005
Response to Office Action dated June 28, 2005

21. (New) A liquid container according to claim 20, wherein a through hole is formed in the first side surface of the inner frame portion.

22. (New) A liquid container according to claim 20, wherein the wall portion has an L-shaped wall face.

23. (New) A liquid container according to claim 20, wherein the inner frame portion includes third and fourth inner side surfaces, and

one end of the wall portion is connected to the inner frame portion near a first corner portion that is formed between the first side surface and the fourth side surface, and another end of the wall portion is located near a second corner portion that is formed between the second side surface and the third side surface so as to oppose the first corner portion where the groove communicates with the waste liquid storing chamber.

24. (New) A liquid container according to claim 20, wherein the waste liquid storing chamber has a substantially rectangular parallelepipedal shape, the waste liquid storing chamber being surrounded by the wall portion, the third side surface and the fourth side surface.

25. (New) A liquid container according to claim 20, wherein an opening of the groove and an opening of the waste liquid storing chamber are covered with a film.

26. (New) A liquid container according to claim 20, wherein a waste liquid absorber is provided in the groove.

U.S. Patent Appln. 10/691,337
Amendment... filed October 28, 2005
Response to Office Action dated June 28, 2005

27. (New) A liquid container according to claim 20, wherein the groove has a volume of not more than 10 % of a volume of the liquid storable in the liquid storing unit.